We claim:

1. A radiographic imaging assembly comprising:

A) a radiographic silver halide film comprising a support having first and second major surfaces and that is capable of transmitting X-radiation, said radiographic silver halide film having a film speed of at least 100,

said radiographic silver halide film having disposed on the first major support surface, one or more hydrophilic colloid layers including at least one silver halide emulsion layer, and on the second major support surface, one or more hydrophilic colloid layers including at least one silver halide emulsion layer,

at least one of said silver halide emulsion layers comprising cubic silver halide grains that have the same or different composition, and

B) a single fluorescent intensifying screen that has a screen speed of at least 200 and comprises an inorganic phosphor capable of absorbing X-rays and emitting electromagnetic radiation having a wavelength greater than 300 nm, said inorganic phosphor being coated in admixture with a polymeric binder in a phosphor layer onto a flexible support and having a protective overcoat disposed over said phosphor layer.

2. The radiographic imaging assembly of claim 1 wherein said cubic silver halide grains are composed of at least 80 mol % bromide based on total silver in the emulsion.

3. The radiographic imaging assembly of claim 1 wherein the at least one silver halide emulsion on the second major support surface comprises predominantly tabular silver halide grains.

4. The radiographic imaging assembly of claim 1 wherein said film comprises a protective overcoat over said silver halide emulsion on each side of said support.

5. The radiographic imaging assembly of claim 1 further comprising an antihalation layer disposed on said second major support surface.

6. The radiographic imaging assembly of claim 1 wherein said cubic silver halide grains in said radiographic silver halide film are doped with a ruthenium hexacoordination complex dopant.

7. The radiographic imaging assembly of claim 1 wherein said radiographic silver halide film comprises a polymer vehicle on each side of its support in a total amount of from about 35 to about 45 mg/dm^2 and a level of silver on each side of from about 10 to about 55 mg/dm^2.

8. The radiographic imaging assembly of claim 1 wherein said cubic grain silver halide emulsion includes dextran with gelatin or a gelatin derivative as the hydrophilic binders.

9. The radiographic imaging assembly of claim 1 wherein said inorganic phosphor is calcium tungstate, activated or unactivated lithium stannates, niobium and/or rare earth activated or unactivated yttrium, lutetium, or gadolinium tantalates, rare earth-activated or unactivated middle chalcogen phosphors such as rare earth oxychalcogenides and oxyhalides, or terbium-activated or unactivated lanthanum or lutetium middle chalcogen phosphor.

10. The radiographic imaging assembly of claim 1 wherein said inorganic phosphor contains hafnium.

11. The radiographic imaging assembly of claim 1 wherein said inorganic phosphor is a rare earth oxychalcogenide and oxyhalide phosphor that is represented by the following formula (1):

$$M'_{(w-n)}M''_nO_wX' \qquad (1)$$

wherein M' is at least one of the metals yttrium (Y), lanthanum (La), gadolinium (Gd), or lutetium (Lu), M" is at least one of the rare earth metals, preferably dysprosium (Dy), erbium (Er), europium (Eu), holmium (Ho), neodymium (Nd), praseodymium (Pr), samarium (Sm), tantalum (Ta), terbium (Tb), thulium (Tm), or ytterbium (Yb), X' is a middle chalcogen (S, Se, or Te) or halogen, n is 0.002 to 0.2, and w is 1 when X' is halogen or 2 when X' is a middle chalcogen.

12. The radiographic imaging assembly of claim 11 wherein said inorganic phosphor is a lanthanum oxybromides, or terbium-activated or thulium-activated gadolinium oxides.

13. The radiographic imaging assembly of claim 1 wherein said inorganic phosphor is an alkaline earth metal phosphor that is the product of firing starting materials comprising optional oxide and a combination of species characterized by the following formula (2):

$$MFX_{1-z}I_zuM^aX^a:yA:eQ:tD \qquad (2)$$

wherein "M" is magnesium (Mg), calcium (Ca), strontium (Sr), or barium (Ba), "F" is fluoride, "X" is chloride (Cl) or bromide (Br), "I" is iodide, M^a is sodium (Na), potassium (K), rubidium (Rb), or cesium (Cs), X^a is fluoride (F), chloride (Cl), bromide (Br), or iodide (I), "A" is europium (Eu), cerium (Ce), samarium (Sm), or terbium (Tb), "Q" is BeO, MgO, CaO, SrO, BaO, ZnO, Al_2O_3, La_2O_3, In_2O_3, SiO_2, TiO_2, ZrO_2, GeO_2, SnO_2, Nb_2O_5, Ta_2O_5, or ThO_2, "D" is vanadium (V), chromium (Cr), manganese (Mn), iron (Fe), cobalt (Co), or nickel (Ni), "z" is 0 to 1, "u" is from 0 to 1, "y" is from 1×10^{-4} to 0.1, "e" is form 0 to 1, and "t" is from 0 to 0.01.

14. The radiographic imaging assembly of claim 1 wherein said inorganic phosphor is present as particles wherein at least 50% of the particles have a size of less than 3 μm and at least 85% of the particles have a size of less

than 5.5 μm, and the coverage of said inorganic phosphor in said phosphor layer is from about 300 to about 400 g/m^2.

15. A radiographic imaging assembly comprising:

A) a radiographic silver halide film comprising a support having first and second major surfaces and that is capable of transmitting X-radiation, said radiographic silver halide film having a film speed of at least 100,

said radiographic silver halide film having disposed on the first major support surface, one or more hydrophilic colloid layers including at least one cubic grain silver halide emulsion layer, and on the second major support surface, one or more hydrophilic colloid layers including at least one tabular grain silver halide emulsion layer,

said cubic grain silver halide emulsion layer having cubic silver halide grains of the same composition and being composed of at least 80 mol % bromide based on total silver in said emulsion layer, and

having a protective overcoat disposed over said silver halide emulsion layers on each side of said support, and further comprising an antihalation layer disposed on said second major support surface,

B) a single fluorescent intensifying screen that has a screen speed of at least 200 and comprises a gadolinium oxysulfide:terbium phosphor capable of absorbing X-rays and emitting electromagnetic radiation having a wavelength greater than 300 nm, said phosphor being coated in admixture with a polymeric binder in a phosphor layer onto a flexible polymeric support and having a protective overcoat disposed over said phosphor layer,

wherein said phosphor is present as particles wherein at least 50% of the particles have a size of less than 3 μm and at least 85% of the particles have a size of less than 5.5 μm, and the coverage of said phosphor in said phosphor layer is from about 300 to about 400 g/m^2.

16. A method of providing a black-and-white image comprising exposing the radiographic imaging assembly of claim 1, and processing said

radiographic silver halide film, sequentially, with a black-and-white developing composition and a fixing composition, said processing being carried out within 90 seconds, dry-to-dry.

17. The method of claim 16 wherein said black-and-white developing composition is free of any photographic film hardeners.

18. The method of claim 16 being carried out for 60 seconds or less.